FAX NO.

Customer No.: 31561
Docket No.: 10721-US-PA

Application No.: 10/711,280

REMARKS

Present Status of Application

According to the Office Action dated August 21, 2006, claims 1 and 6 were

rejected under 35 U.S.C.§102(b) as being anticipated by Lin (US Publication No.

2002/0105076 A1; hereinafter Lin'076). Claims 3-4 were rejected under 35

U.S.C.§103(a) as being unpatentable over Lin'076 in view of Lee (US Publication No.

2002/0104449; hereinafter Lee'449). Claims 5 and 7-8 were rejected under 35

U.S.C.§103(a) as being unpatentable over Lin'076 in view of Lcc et al. (US Publication

No. 2003/0134496; hereinafter Lce'496).

After carefully considering the remarks set forth in this Office Action and the cited

references, Applicants respectfully submitted that the presently pending claims are in

condition for allowance. Reconsideration and withdrawal of these rejections are

respectfully requested.

Discussion for 35 USC§102 and 103 rejections

Claims I and 6 were rejected under 35 U.S.C.§102(b) as being anticipated by Lin

(US Publication No. 2002/0105076 AI; hereinafter Lin'076). Claims 3-4 were rejected

under 35 U.S.C.§103(a) as heing unpatentable over Lin'076 in view of Lee (US

Publication No. 2002/0104449; hereinaster Lee'449). Claims 5 and 7-8 were rejected

-2-

PAGE 4/8 \* RCVD AT 11/21/2006 4:35:36 AM [Eastern Standard Time] \* SVR:USPTO-EFXRF-2/2 \* DNIS:2738300 \* CSID: \* DURATION (mm-ss):02-14

Customer No.: 31561

Docket No.: 10721-US-PA

Application No.: 10/711,280

under 35 U.S.C.§103(a) as being unpatentable over Lin'076 in view of Lee et al. (US

Publication No. 2003/0134496; hereinafter Lee '496).

The Applicant has carefully considered the remarks set forth in the Office Action.

The Office Action considered that Lin'076 substantially disclose the present

invention.

Applicants respectfully disagree and traverse the rejections based on at least the

following reasons.

For the 102 rejections of independent claim 1:

Lin'076 discloses a method of removing damage to I/O pads that have been

contacted by test probes (see Field of Invention). As shown in Figure. 9, Lin'076 teaches

providing "the silicon substrate 10 over the surface of which an aluminum contact pad has

been created" (paragraph [0065]), a dielectric material layer 29 over the substrate 10, and

depositing a passivation layer 32 over the surface of the layer 29. Moreover, Lin'076

teaches the preferred material of the passivation layer 32 being silicon nitride Si<sub>3</sub>N<sub>4</sub>

(paragraph [0074]).

The Office Action alleged Lin's substrate 10 and layer 32 as comparable to the

wafer and electrodes of this invention respectively, and even asserted device elements

(such as, diodes) recited by Lin (paragraph [0004]) as comparable to the LED chips of this

invention.

-3-

PAGE 5/8 \* RCVD AT 11/21/2006 4:35:36 AM [Eastern Standard Time] \* SVR:USPTO-EFXRF-2/2 \* DNIS:2738300 \* CSID: \* DURATION (mm-ss):02-14

Customer No.: 31561

Docket No.: 10721-US-PA
Application No.: 10/711,280

P. 06/08

According to Lin's context (paragraph [0004]) reciting "The creation of monolithic integrated circuits requires the creation of numerous interacting electrical device elements, which are typically created in or on the surface of a semiconductor substrate. Among these device elements are transistors, diodes, bipolar transistors, CMOS Field Effect Transistors of either N or P channel type and the like.", it is clear to any sensible person that this statement merely describes various device elements in the semiconductor manufacturing industry. Further, nothing is mentioned anywhere in Lin's paper that the substrate 10 includes anything other than the aluminum contact pad 24. The Office Action does not provide a reasonable grounds or rationale about how Lin's teachings lead to equivalence or similarity as the step "providing a wafer having a plurality of LED chips thereon", unless using the present invention as a blue print.

In addition, as clearly described and defined in Lin's paper, layer 32 is a passivation layer, which is totally different from electrodes that are electrically conductive. Moreover, as taught in Lin's paragraph [0090], layer 35 (alleged by Office Action as the posts of this invention) of bump material is electroplated in contact with layer 34, which is contrary to the posts formed by a printing process as recited in independent claim 1 of this invention.

Applicants therefore submit that the independent claim patently defines over the prior reference Lin'076 for at least the reason that the cited art fails to disclose each and

FAX NO.

Customer No.: 31561
Docket No.: 10721-US-PA

Application No.: 10/711,280

every feature as claimed in the present invention. Particularly, the reference Lin'076 fails

to teach or suggest at leas the feature "providing a wafer having a plurality of LED chips

thereon, wherein each of the LED chips comprises a plurality of electrodes" or "forming a

plurality of posts on the under bump metallurgy layers by a printing process".

Accordingly, the independent claim 1 clearly distinguishes the present invention

over the cited reference Lin'076.

Dependent claim 6 is submitted to be patentably distinguishable over the cited

reference for at least the same reasons as independent claim I, from which these claims

respectively depend, as well as for the additional features that these claims recite.

As for the 103 rejections, the Office Action relied on Lec'449 or Lee'496 for

respectively teaching the additional features recited in claims 3-4 and claims 5 & 7-8.

However, neither Lee'449 nor Lee'496 is able to remedy the deficiencies of

Lin'076. Because all the cited references fail to teach, suggest or disclose each and every

feature of the present invention, and therefore they cannot possibly arrive at the claimed

invention, as suggested by the Office Action. Applicants respectfully submit that claims

3-5 & 7-8 patently define over the reference Lin'076, Lee'449 or Lee'496 for at least the

above reasons, and should be allowed.

In view of the above discussions, reconsideration and withdrawal of these

rejections under 35 USC 102(b) and 103(a) are respectfully requested.

-5-

PAGE 7/8 \* RCVD AT 11/21/2006 4:35:36 AM [Eastern Standard Time] \* SVR:USPTO-EFXRF-2/2 \* DNIS:2738300 \* CSID: \* DURATION (mm-ss):02-14

Customer No.: 31561
Docket No.: 10721-US-PA
Application No.: 10/711,280

## **CONCLUSION**

In view of the foregoing, it is believed that all pending claims are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Date: Nov. 21, 2006

Respectfully submitted,

Belinda Lee

Registration No.: 46,863

Jianq Chyun Intellectual Property Office 7th Floor-1, No. 100 Roosevelt Road, Section 2 Taipei, 100 Taiwan

Tel: 011-886-2-2369-2800 Fax: 011-886-2-2369-7233

Email: <u>belinda@jcipgroup.com.tw</u>
<u>Usa@jcipgroup.com.tw</u>